Claims pending

- At time of the Action: Claims 1-40
- After this Response: Claims 1-40

Canceled or Withdrawn claims: Claims 14, 24, 30, 39 (all currently) and 41-74 (previously)

Amended claims: Claims 1-2, 4-5, 7-13, 15, 18-23, 25-29, 31-38 and 40

New claims: None

1.   **(Currently Amended)** Interfaces, stored on one or more computer-readable media, to be called on kernel transaction management objects, comprising:

application program interfaces (APIs) to implement operations on a kernel transaction object (TX), ~~at least one~~the TX representing a transaction, the TX ~~and~~being accessible ~~to~~by at least one process participating in the transaction;

APIs to implement operations on a kernel resource management object (RMO), ~~at least one~~the RMO representing a relationship between a TX associated with ~~a corresponding~~the transaction manager and at least one resource that participates in the transaction, the resource being an entity capable of storing data in a durable state; and

APIs to implement operations on a kernel enlistment (EN) object, ~~at least one~~the EN representing a relationship between a resource manager and the transaction.

2.   **(Currently Amended)** Interfaces according to Claim 1, wherein each of the APIs to implement operations on the TX, the RMO, and the EN utilize a handle to refer to an object.

3.   **(Original)** Interfaces according to Claim 2, wherein each of the handles is an opaque reference to a unique object.

4.   **(Currently Amended)** Interfaces according to Claim 2, wherein at least one of the APIs ~~API~~ calls for the TX to transmit pre-prepare messages to resource managers associated with a transaction.

5.   **(Currently Amended)** Interfaces according to Claim 2, wherein at least one of the APIs ~~API~~ calls for the TX to transmit a prepare request to resource managers enlisted in a transaction.

6.   **(Original)** Interfaces according to Claim 2, wherein at least one of the APIs ~~API~~ calls for a new TX to be created for a transaction.

7.   **(Currently Amended)** Interfaces according to Claim 2, wherein at least one ~~of the APIs~~ API calls for ~~an existing~~the TX to be opened for a transaction.

8.   **(Currently Amended)** Interfaces according to Claim 2, wherein at least one of the APIs ~~API~~ calls for the TX to commit a transaction.

9.   **(Currently Amended)** Interfaces according to Claim 2, wherein at least one of the APIs ~~API~~ calls for the TX to abort a transaction.

10.   **(Currently Amended)** Interfaces according to Claim 2, wherein at least one of the APIs ~~API~~ calls for the TX to save a current state of the transaction.

11.   **(Currently Amended)** Interfaces according to Claim 2, wherein at least one of the APIs ~~API~~ calls for the TX to retrieve information about the TX for a requestor.

12.   **(Currently Amended)** Interfaces according to Claim 2, wherein at least one of the APIs ~~API~~ calls for the TX to set information.

13.   **(Currently Amended)** Interfaces according to Claim 2, wherein at least one of the APIs ~~API~~ calls for the TX to close.

14.   **(Canceled)**

15.   **(Currently Amended)** Interfaces according to Claim 2, wherein at least one ~~of the APIs~~ ~~API~~ calls for a new RMO to be created.

16.   **(Original)** Interfaces according to Claim 15, wherein the new RMO is volatile.

17.   **(Original)** Interfaces according to Claim 15, wherein the new RMO is durable.

18.   **(Currently Amended)** Interfaces according to Claim 2, wherein at least one of the APIs ~~API~~ calls for ~~an existing~~ the RMO to open for a transaction.

19.   **(Currently Amended)** Interfaces according to Claim 2, wherein at least one of the APIs ~~API~~ calls for the RMO to be destroyed.

20.   **(Currently Amended)** Interfaces according to Claim 2, wherein at least one of the APIs ~~API~~ calls for the RMO to transmit information regarding the RMO to a requestor.

21.	**(Currently Amended)** Interfaces according to Claim 2, wherein at least one of the APIs ~~API~~ calls for the RMO to set information.

22.	**(Currently Amended)** Interfaces according to Claim 2, wherein at least one of the APIs ~~API~~ calls for the RMO to be enlisted on a transaction at least once.

23.	**(Currently Amended)** Interfaces according to Claim 2, wherein at least one of the APIs ~~API~~ calls for a notification from a resource manager for the RMO.

24.	**(Canceled)**

25.	**(Currently Amended)** Interfaces according to Claim 2, wherein at least one of the APIs ~~API~~ is to implement operations on the TX by the RMO.

26.	**(Currently Amended)** Interfaces according to Claim 25, wherein the at least one of the APIs ~~API~~ is to inform the TX that pre-preparing is complete.

27.	**(Currently Amended)** Interfaces according to Claim 25, wherein the at least one of the APIs ~~API~~ is to inform the TX that transaction preparation has been completed by a requested resource manager.

28.   **(Currently Amended)** Interfaces according to Claim 25, wherein the at least one of the APIs ~~API~~ is to inform the TX that a resource manager has completed rolling back a transaction.

29.   **(Currently Amended)** Interfaces according to Claim 25, wherein the at least one of the APIs ~~API~~ is to inform the TX that a resource manager has committed to a transaction.

30.   **(Canceled)**

31.   **(Currently Amended)** Interfaces according to Claim 2, wherein at least one of the APIs ~~API~~ calls for a resource manager to be registered as a communications resource manager for a particular protocol.

32.   **(Currently Amended)** Interfaces according to Claim 2, wherein at least one of the APIs ~~API~~ calls for a representation of a transaction to be serialized into a buffer.

33.   **(Currently Amended)** Interfaces according to Claim 2, wherein at least one of the APIs ~~API~~ calls for information representing registered protocols to be serialized into a buffer.

34. **(Currently Amended)** Interfaces according to Claim 32, wherein at least one of the APIs ~~API~~ calls for a transaction represented by the serialization be made available by a transaction management object.

35. **(Currently Amended)** Interfaces according to Claim 2, wherein at least one of the APIs ~~API~~ calls for a transaction to be propagated to a destination using push-style propagation.

36. **(Currently Amended)** Interfaces according to Claim 35, wherein at least one of the APIs ~~API~~ calls for the output of the API calls for the transaction to be propagated to a destination using push-style propagation to be retrieved.

37. **(Currently Amended)** Interfaces according to Claim 31, wherein at least one of the APIs ~~API~~ is called when transaction propagation has been completed.

38. **(Currently Amended)** Interfaces according to Claim 31, wherein at least one of the APIs ~~API~~ is called when a requested transaction propagation has failed.

39. **(Canceled)**

40. **(Currently Amended)** An apparatus for implementing a transaction, comprising:

a kernel transaction object (TX) to represent a transaction, the TX ~~and~~ being accessible ~~to~~ by at least one process participating in the transaction;

a kernel resource manager object (RMO) to represent a relationship between a TX associated with ~~a corresponding~~the transaction manager and at least one resource that participates in the transaction, the resource being an entity capable of storing data in a durable state; and

a kernel enlistment object (EN) to represent a relationship between a resource manager and the transaction,

wherein two-phase commit processing is executed by calling APIs on the TX, the RMO, and the EN.

41-74. **(Previously Canceled)**